

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/002505

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/62 C12N9/78

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 545 548 A (LINSLEY PETER ET AL) 13 August 1996 (1996-08-13) the whole document	1-5, 10-12, 15-20, 24-40
X	WO 94/28143 A (TARGETED GENETICS CORP) 8 December 1994 (1994-12-08) claims 1 and 2 and Fig.1 discloses fusion of CD with hph and neo the whole document	1-5, 15-20, 24-40
E	WO 2004/061079 A (ONYX PHARMA INC) 22 July 2004 (2004-07-22) page 8, line 12 - line 13 -/--	1-5, 15-20, 24-40

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

15 November 2004

Date of mailing of the international search report

30/11/2004

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Luo, X

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2004/002505

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99/54481 A (ERBS PHILIPPE ; TRANSGENE (FR); JUND RICHARD (FR)) 28 October 1999 (1999-10-28) SEQ ID NO:2 discloses the fusion of CD with active UPRTase the whole document	
A	US 6 552 005 B1 (MILLER C RYAN ET AL) 22 April 2003 (2003-04-22) discloses a fusion protein of CD and active UPRTase abstract	
A	KERN L ET AL: "The FUR1 gene of Saccharomyces cerevisiae: cloning, structure and expression of wild-type and mutant alleles" GENE, ELSEVIER BIOMEDICAL PRESS. AMSTERDAM, NL, vol. 88, no. 2, 1990, pages 149-157, XP002087000 ISSN: 0378-1119 discloses the mutation fur1-8 used in the application the whole document	
A	MEYER H ET AL: "MAPPING OF DELETIONS IN THE GENOME OF THE HIGHLY ATTENUATED VACCINIA VIRUS MVA AND THEIR INFLUENCE ON VIRULENCE" JOURNAL OF GENERAL VIROLOGY, READING, BERKS, GB, vol. 72, 1991, pages 1031-1038, XP000952390 ISSN: 0022-1317 the whole document	21-23

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2004/002505

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 39-40 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/002505

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5545548	A	13-08-1996	US 5338678 A	16-08-1994
			AT 118040 T	15-02-1995
			AU 5991290 A	13-12-1990
			CA 2018273 A1	09-12-1990
			CN 1050221 A ,B	27-03-1991
			CS 9002865 A3	19-02-1992
			DE 69016502 D1	16-03-1995
			DE 69016502 T2	01-06-1995
			DK 402108 T3	10-04-1995
			EP 0402108 A1	12-12-1990
			ES 2070277 T3	01-06-1995
			FI 95046 B	31-08-1995
			GR 3015207 T3	31-05-1995
			IE 66054 B1	13-12-1995
			IL 94649 A	27-11-1995
			JP 3001933 B2	24-01-2000
			JP 4131084 A	01-05-1992
			NO 902551 A	10-12-1990
			NZ 233949 A	25-06-1992
			OA 9214 A	30-06-1992
			PL 285552 A1	25-02-1991
			PT 94331 A ,B	20-03-1991
			YU 112090 A1	28-05-1992
			AU 642656 B2	28-10-1993
			DD 294969 A5	17-10-1991
			ZA 9004404 A	27-03-1991
WO 9428143	A	08-12-1994	AU 6953394 A	20-12-1994
			CA 2163427 A1	08-12-1994
			EP 0804590 A1	05-11-1997
			JP 9500783 T	28-01-1997
			WO 9428143 A1	08-12-1994
			US 6555370 B1	29-04-2003
WO 2004061079	A	22-07-2004	WO 2004061079 A2	22-07-2004
			US 2004180418 A1	16-09-2004
WO 9954481	A	28-10-1999	FR 2777570 A1	22-10-1999
			AU 766911 B2	23-10-2003
			AU 3335499 A	08-11-1999
			CA 2292882 A1	28-10-1999
			EP 0998568 A1	10-05-2000
			WO 9954481 A1	28-10-1999
			JP 2002511769 T	16-04-2002
			US 2003186415 A1	02-10-2003
			US 6596533 B1	22-07-2003
US 6552005	B1	22-04-2003	US 6599909 B1	29-07-2003
			US 2003148984 A1	07-08-2003